

CLAIM AMENDMENTS

1 1. (original) A method for producing hydrogen by
2 reacting amorphous silicon with water.

1 2. (original) A method for producing hydrogen by
2 reacting amorphous silicon with an alcohol.

1 3. (original) A method for producing hydrogen by
2 reacting amorphous silicon with a carboxylic acid.

1 4. (currently amended) The method according to ~~claim 1~~
2 claim 2, ~~characterized in that wherein~~ black chemically uncovered
3 amorphous silicon is used.

1 5. (currently amended) The method according to ~~claim 1~~
2 claim 2, ~~characterized in that it is~~ carried out at ambient
3 temperature.

1 6. (currently amended) The method according to ~~claim 1~~
2 claim 2, ~~characterized in that wherein~~ brown chemically covered
3 amorphous silicon is used.

1 7. (Currently amended) The method according to claim 6,
2 ~~characterized in that the reactivity (reaction temperature)~~ wherein

3 the reaction temperature of the brown amorphous silicon is
4 controlled by ~~control~~ selection of the chemical covering of the
5 same.

1 8. (currently amended) The method according to claim 2,
2 ~~characterized in that~~ wherein the compounds $\text{Si}(\text{OR})_4$, wherein R
3 means an ~~organic radical, especially alkyl radical or carboxylic~~
4 ~~acid radical, generate~~ generated during the hydrogen production
5 with amorphous silicon and an alcohol ~~or with a carboxylic acid~~ are
6 converted into $\text{SiO}_2 + \text{HOR}$ by hydrolysis.

1 9. (New) The method according to claim 7 wherein the
2 chemical covering on the brown amorphous silicon is ammonia.

1 10. (New) A method for producing hydrogen, which
2 comprises the steps of:

3 (a) reacting amorphous silicon with an alcohol at ambient
4 temperature using either black chemically uncovered amorphous
5 silicon or brown chemically covered amorphous silicon to obtain
6 molecular hydrogen and $\text{Si}(\text{OR})_4$ wherein R is alkyl; and

7 (b) hydrolyzing the $\text{Si}(\text{OR})_4$ to recover the alcohol and
8 SiO_2 .

1 11. (New) The method for producing hydrogen defined in
2 claim 10 wherein the alcohol is methanol or ethanol.